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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/605,070

09/05/2003

George H. Lane III

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08/09/2006

MORRIS, MANNING & MARTIN LLP  
1600 ATLANTA FINANCIAL CENTER  
3343 PEACHTREE ROAD NE  
ATLANTA, GA 30326

EXAMINER

DESTA, ELIAS

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/605,070	<b>Applicant(s)</b> LANE ET AL.	
	<b>Examiner</b> Elias Desta	<b>Art Unit</b> 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/5/2003</u> | 6) <input type="checkbox"/> Other: _____  |

## **Detailed Action**

### **Claim rejection – 35 U.S.C. 101**

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-39 are directed to non-statutory subject matter. In reference to claims 1, 18 and 31: the output from the system that includes collecting data from the work order and analyzing the collected data is not tangible and concrete.

The claimed invention as a whole must accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of “real world” value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); *In re Ziegler*, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)).

A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. Referring to the “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” in determining whether the claim is for a “practical application,” the focus is not on whether the steps taken to achieve a particular result

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are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete."

The step of collecting and analyzing the service data does not constitute a new or improved output that is considered useful, concrete and tangible. However, the outcome is useful and has a potential to do something concrete and tangible if it is carried out by further process. However, in the absence of a useful, concrete and tangible result, the claims are deemed to be non-statutory.

### **Claim rejection - 35 U.S.C 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-11, 13-24 and 26-39 are rejected under 35 U.S.C. 102 (e) as being unpatentable over Li (U.S. Patent 6,609,050).

*In reference to claims 1, 18 and 31: Li teaches a method for processing maintenance work orders (see Li, Fig. 1). The method includes:*

- Identifying maintenance problem (see Li, Fig. 6 section 96 and Fig. 9, 'line item analysis');
- Generating a work order for the maintenance problem in a computer, including the location of the problem and the type of the problem (see Li, Figs. 10 and 11);
- Assigning the work order to a technician to fix the problem (see Li, Fig. 14 and column 4, lines 49-53);
- Entering data from each the technician into the computer related to the technician completing the work order, including the action taken to fix the problem and the elapsed time to complete the work order (see Li, Fig. 8, module 204, service advisor or technician); and
- Collecting the data from each work orders and analyzing the collected data with respect to one of the characteristics of similar types of problems stored in the computer (see Li, Fig. 3, 'repair processing module 40', Figs. 24 & 25, and column 3, lines 60-65).

As transferring the data or communicating electronically, all the actions are performed through the electronic or network computer system having a dedicated database structure to store and facilitate all the functions required for running the maintenance work order method (see Li, Fig. 1).

*With regard to claims 2, 19 and 32: Li further teaches that the method includes communicating the problem to the maintenance office (see Li, Fig. 7, Pre-Diagnosis System).*

*With regard to claim 3: Li further teaches that the method includes electronically assigning each work order (see Li, Fig. 17).*

*With regard to claims 4: Li further teaches that the method includes recording the technician work order assignment in a computer (see Li, Figs. 1 and 17).*

*With regard to claims 5: Li further teaches that the method includes electronically transmitting and entering the service data from the technician because customers have access to obtain vehicle related data through the network (see Li, Figs. 1, 23 and 24, service request and customer statement dialogue box).*

*With regard to claim 6: Li further teaches that the method includes a computer interface where the customer identifies at least one of the maintenance problems (see Li, Fig. 9, COSM Screen, customer identifying the problem).*

*With regard to claims 7 and 20: Li further teaches that the method includes customer communicating the problem to the maintenance office (see Li, Fig. 9, COSM screen also includes 'Tech Recommended Service' screen).*

*With regard to claims 8 and 21: Li further teaches that the customer electronically communicates the problem to the maintenance office because the communication is established over a computer network (see Li, Fig. 1).*

*With regard to claims 9 and 22: Li further teaches that the service technician notifies the customer of the completion of the work order (see Li, Fig. 20, 'task window').*

*With regard to claims 10, 23 and 33: Li further teaches that the method includes the customer electronically communicating and generating work order (see Li, Figs. 8 and 9).*

With regard to claims 11, 24 and 34: Li further teaches that the method includes customer electronically checking the status of the work order (see Li, Fig. 23, service request window).

With regard to claims 13, 26 and 35: Li further teaches that the method includes updating the collected data with the characteristics of completed work order (see Li, column 5, lines 45-49).

With regard to claims 14, 27 and 36: Li further teaches that the method includes tailoring each work order to include specific characteristic of the location (see Li, Fig. 17, such as vehicle shaking at high speed with respect to break or transmission problem).

With regard to claims 15, 28 and 37: Li further teaches that the method includes analyzing the elapsed time and the data to determine if training of the technician is warranted (see Li, column 3, lines 23-31).

With regard to claims 16, 29 and 38: Li further teaches that analyzing the data and generating the reports related to the data and the technician (see Li, column 3, lines 17-22).

With regard to claims 17, 30 and 39: Li further teaches that the method includes analyzing the data and identifying trends (e.g., steering wheel shaking at high speed) related to the data (see Li, column 3, lines 32-39).

### **Claim rejection – 35 U.S.C. 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li (U.S. Patent 6,609,050) in view of Squeglia et al. (U.S. PAP 2002/0156692, hereon Squeglia).

In reference to claims 12 and 25: Li further teaches that the customer transmits the work order through a computer network (see Li, Figs. 1 and 9). However, Li does not teach that the customer request for work order is transmitted through a wireless network.

Squeglia teaches a computerized method and system for managing equipment maintenance and service using portable units (see Squeglia, Fig. 2), which may be <sup>connected</sup> ~~converted~~, to a service shop via wireless communication (see Squeglia, Paragraph [0023]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the computerized work order system as taught by Li, and incorporate a wireless interface unit as shown in Fig. 1 of Squeglia in order to facilitate the customer work order with a portable networked computer device because the portable or wireless network provides the customer to communicate any maintenance related issues with the technician prime and enables the customer to send multimedia type information, such as picture clips, sound or other forms of data to the maintenance center and obtain service data from the technician (see Squeglia, page 7, paragraph 56).

### Conclusion

7. Citation of pertinent prior art:

- Sasaki et al. (IEEE Article, 'Development of Intelligent Workflow System Using Know-how acquired Based on Work Order') teaches a method of managing work flow using stored detailed process of work as work log, and finding out the "know-how" of work by analyzing the stored work-log.



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- Muller et al. (IEEE Article, 'A Simulation-Based Work Order Release Mechanism For A Flexible Manufacturing System') teaches an integrated simulation model and its use for a prescriptive tool to support real-time decision-making process for work order release, fixture build-up and raw material requirement.
- Eryurek et al. (U.S. Patent 6,795,798) teaches remote analysis of process control plant data.
- Jones et al. (U.S. PAP 2004/0062359) teaches user interface and system to facilitate telephone circuit maintenance and testing.
- Pangrac et al. (U.S. PAP 2003/0134599) teaches field technician assistant.
- Howman et al. (U.S. PAP 2003/0040826) teaches method and apparatus for managing maintenance operations.
- Tveit et al. (U.S. PAP 2002/0087220) teaches system and method to provide maintenance for an electrical power generation, transmission and distribution system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Th (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

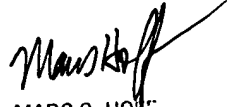
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elias Desta  
Examiner  
Art Unit 2857

- E.d.

July 31, 2006

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800